Vegetarian 86-03

March 24, 1986

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Note: Anyone is free to use the information in this newsletter. Whenever possible, please give credit to the authors.

The use of trade names in this publication is solely for the purpose of providing information and does not necessarily constitute a recommendation of the product.
NEW LOOK FOR THE VEGETARIAN - With this issue, we are trying out a new format for the Vegetarian. Hopefully as the new format develops, we can add the use of art work and colored paper. If you have any suggestions, please pass them along.

I. NOTES OF INTEREST

A. New Publications

Agricultural Experiment Station, Circular S-323, June 1985. HORIZON

B. Vegetable Crops Calendar


May 8, 1986. Cucumber/Squash Variety Demonstration 4:00pm – 8:00pm, AREC Leesburg, G.W. Elmstrom


June 4, 1986. Watermelon Field Day 1:30pm – 5:00pm, AREC Leesburg, G.W. Elmstrom

II. COMMERCIAL VEGETABLES

A. Pumpkin Varieties for Florida.

Pumpkins have not been grown commonly as a commercial crop in Florida. The demand for pumpkins during the fall holiday – Halloween and Thanksgiving-season, however, suggests that considerably more pumpkins could be grown and profitably sold within the state. Pumpkins, like other cucurbits, can be successfully double cropped on full-bed plastic mulch in the summer and fall following a spring tomato crop, for example.

As with other vegetables, it is essential to have a marketing plan before one can decide which varieties are appropriate to consider for production. For local market-roadside stand or PYO - all sizes of pumpkins are in demand, hence growers would want to select an array of varieties bearing quite large to miniature fruit. On the other hand, for wholesale the focus probably should be on varieties producing medium to large fruit.

To identify pumpkin varieties for West Central Florida, a variety demonstration was conducted as a second-crop following spring tomatoes on a commercial farm in Manatee County in the summer-fall of 1985. In the absence of more specific information, these results may be used as a guide for variety selection for other parts of the state.

Seed of 18 varieties or advanced breeding lines were direct seeded on July 22. Spacing was 4 ft. between plants on raised beds covered with black plastic on 13 ft. centers with irrigation ditches between each row. The pumpkin crop was grown on residual fertilizer remaining from the spring tomato crop. Standard pesticides were applied approximately weekly for disease management and as needed for insect management. Fruit were harvested on October 3 and October 15.

Average fruit weight ranged from 1.8 lb for 'Little Lantern' and 'Small Sugar' to 11.1 lb for 'Connecticut Field', and average fruit size (H x D) ranged from 4.0 x 5.3 inches for 'Little Lantern' to 9.6 x 10.2 inches for 'Connecticut Field'.

Highest marketable yield based on fruit weight was produced by 'Jack O'Lantern' (4,852 lbs/1000 linear bed ft.), an open-pollinated vining type pumpkin. 'HMX4679', a semi-bush hybrid from Harris-Moran,
yielded the second highest marketable yield at 4566 lbs/1000 linear bed ft. 'Pankow's Field', a vining, open-pollinated variety ranked third at 4456 lbs/1000 linear bed ft.

Marketable yield based on fruit number was highest for 'Little Lantern' with a yield of 1060 fruit/1000 linear bed ft. 'Little Lantern' and 'Small Sugar' were the smallest varieties in the trial. 'Triple Treat', a small pumpkin for pies and jack-o-lanterns, ranked second in number produced, with 900 fruit/1000 linear bed ft. The next highest yield was 'Spookie' at 780 fruit/1000 linear bed ft. Yield (fruit number) was low for 'Trick or Treat' due to poor germination and plant stand.

'Little Lantern' produced an earlier yield than most, with 74% harvested at the first picking. 'Jack O'Lantern' also had a high early yield with 71% harvested at the first picking. The majority of the entries had a more even distribution between harvests. Two exceptions were 'Triple Treat' and 'Howden' which produced 77% and 73%, respectively, at second harvest.

Based on the results of this trial and a 1982 trial conducted by T. K. Howe and W. E. Waters at the Gulf Coast Research & Education Center, growers may wish to consider the following pumpkin varieties:

Big Max. A nearly round, deep-orange colored, faintly-sutured, very large-fruited, late maturing, open-pollinated variety. Although Big Max is a true squash (Cucurbita maxima), it can be marketed as a pumpkin (Cucurbita pepo).

Pankow's Field (Harris Moran). A large, large-fruited, orange-skinned, open-pollinated variety.

Jackpot (Harris Moran). A compact-vine, hybrid, bearing medium to large, orange-yellow fruit.

Connecticut Field. The standard, medium to large fruited, orange-skinned, open-pollinated variety.


Jack O'Lantern (Northup King). An open-pollinated variety producing smooth, medium-orange, medium-sized fruit.

Young's Beauty (Harris-Moran). An open-pollinated, vining variety producing medium-sized, dark-orange fruit.

Little Lantern (Stokes). A prolific, open-pollinated, variety bearing miniature to small, orange fruit.

Growers should take into consideration yield, market potential and past experience, if available, when choosing varieties. Early yield may also be a factor in some situations. It may be helpful to plant a number of varieties of different sizes to determine what best fits a particular market situation. The very small varieties seem to be popular for use in crafts, seasonal decorations and as children's gifts.

For more details, request Bradenton GCREC Research Report BRA1986-1 from the authors.

(Maynard & Gilreath Veg. 86-03)

B. 1986 Commercial Vegetable In-Service Training Program

On the following page is the program for the upcoming commercial vegetable inservice training program. This year's program will be held in Sanford, FL and will focus on vegetable fertilizer management.

(Hochmuth Veg. 86-03)
COMMERCIAL VEGETABLE IN-SERVICE TRAINING

Date: April 28-30, 1986
Place: Seminole County Agricultural Center
Topic: Commercial Vegetable Fertilization

PROGRAM

April 28

Vegetable Soils, Plant Nutrition, and Soil Testing

8:00 A.M. Assemble

8:15 Jerry Kidder - The Vegetable Soils of Florida

9:00 Don Maynard - Principles of Plant Nutrition
- Required nutrients and roles in plant physiology
- Lime and relation to plant nutrition
- Mobility of plant nutrients in soil and plant
- Crop demand curves
- Deficiency diagnosis
- Cultivar differences in plant nutrition
- Environmental effects on plant nutrition

10:00 Break

10:15 Ed Hanlon - Soil and Tissue Testing
- Why we soil test
- Soil sample collection for fertilizer recommendations
- Soil sample collection for deficiency diagnosis
- Tissue sampling and test interpretations
- Sampling soils for soluble salts
- Sampling soils for double-crop schemes
- Test interpretations
- "Pounds per acre" or "linear bed feet"
- The University of Florida soil test report format
- Using commercial labs
- Looking at some test results from various labs
- Effect of soil type on the lime requirement

12:00 PM Lunch - Quincy's Restaurant

1:30-5:00 Tour - Zellwin Farms, Zellwood
- Transplant production
- Field production
- Packing houses

Evening - On your own - Entertainment possibilities will be provided
April 29

Fertilizers and Fertilizer Management

8:00 AM  Assemble

8:15  Movie: Fertilizer Mining and Manufacture presented by International Minerals and Chemicals Corporation

9:00  George Hochmuth - Fertilizers and Fertilization
- Sources, placement, timing
- Slow release fertilizers
- Foliar fertilization
- Costs of fertilizer misuse

9:40  Dorota Hamon - Fertigation
- Drip irrigation
- Overhead irrigation

10:00  Break

10:15  Jerry Kidder - Fertilizer practices and groundwater issues

10:45  Ed Hanlon - Laboratory and Field Quick Tests (Bring your pH and soluble salts meter).

12:00 PM  Lunch - Catered lunch at Agric. Center

1:00-5:00  Demonstration Tour - Sanford AREC
- Fertilizer recommendation formulation
- Executing a fertilizer demonstration trial
- Deficiency symptoms and soluble salt demonstrations
- Liquid fertilizer injection wheel demonstration

Evening  Barbecue

April 30

Planning Session

8:00 AM  Assemble

8:15-12 Noon  Planning Session - The topic of the next Commercial Vegetable In-Service Training program will be "Vegetable Cultivars, Seed Technology, and Stand Establishment." (An agenda for the planning session will be provided; please send your ideas so that they can be placed on the planning session agenda).
C. Summary Of Result/Demonstration Project Examining The Use Of Row Covers For Frost Protection In Strawberries

LOCATION: Keene Road, Plant City
COOPERATOR: Steve McDonald, McDonald Farms

Three row cover materials (polypropylene 0.6 oz./yd. and 1.5 oz./yd. manufactured by Kimberly-Clark and a plastic foam material approximately 1/8 inches thick manufactured by IPM, Inc.) were placed in a commercial strawberry field to examine their potential for protecting against frost/freeze damage. The covers were loosely placed over 26 ft. of individual beds at 2 p.m. on January 27, 1986 and removed at 3 p.m. on January 29, 1986. One half of the plots received overhead irrigation when the grower irrigated the remaining portion of his field for the purpose of frost protection. The remaining plots were kept dry through the placement of sprinkler shields at the necessary locations. Two unirrigated check plots were also included in this trial. Minimum air temperatures in the field reached 23 degrees F. on the morning of January 28, and 26 degrees F. on the morning of January 29. The duration of temperatures below 28 degrees F. was approximately six hours on both days. Winds were generally calm with speeds occasionally reaching 3 - 4 miles per hour. Air temperatures beneath the row covers measured before sunrise (at approximately 6:30 a.m.) were running approximately 7 degrees F. above air temperature for the plastic IPM material and 6 - 7 degrees F. and 5 - 6 degrees F. for the 1.5 oz./yd. and 0.6 oz./yd. Kimberly-Clark materials respectively.

After removing the covers, the plots were inspected for any damage to blossoms, green fruit, ripe fruit and foliage. Plots receiving no irrigation and without cover had 100% damage to the blossoms and all fruit. All plots with row covers were essentially free of damage to blossoms as well as the green and ripe fruit. The plots where the grower carried out his normal irrigation practices for frost protection were also free of damage except in a few small areas where there was an inadequate overlap of his sprinkler pattern perhaps due in part to the light winds. Some foliar damage was noticed on plants covered with the IPM material. It is believed that this "foliar burn" was caused by high temperatures underneath this cover that were reached prior to its removal on the afternoon of the 29th. It should also be noted that the covered plots that were to receive no irrigation likely received some minimal amount of water from drift and spray that could not be blocked. This primarily occurred on the first evening of freezing temperatures.

This demonstration showed that if these or similar row cover materials could be made cost effective, they should provide adequate protection for strawberries from cold temperatures at least down to 23 degrees F. The major obstacles to commercial adaptation of this practice currently are the high cost of the materials and the absence of a suitable method for quick application and removal of the row covers.

(Mitchell, Hochmuth, Veg. 86-03)

III. VEGETABLE GARDENING

A. Florida State Fair Horticulture Contest

Over 150 students participated in the 4-H and FFA State Fair Horticulture Contest on February 8 in Tampa. There were four sections in the contest: identification of Fruit Crops, Vegetable Crops and Ornamentals and the judging of 3
classes of horticultural products.
The winners and participants in the 4-H Section were the following:

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<th>Name</th>
<th>Individual Score</th>
<th>County: Leon</th>
<th>Team Score</th>
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<tr>
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<td>Anglea Heitmeyer</td>
<td>53</td>
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<td>Joe Judge</td>
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<td>Eric Hernandez</td>
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<tr>
<td>Nick Hernandez</td>
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<td></td>
<td></td>
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<tr>
<td>Sean York</td>
<td>93</td>
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<td>272 +</td>
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<td>Tammy Brown</td>
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<td>April Head</td>
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<td>Janet Schock</td>
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<td>Joanne Whitfield</td>
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<tr>
<td>Gavin Farrell</td>
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Any 4-H or horticulture agent, Vocational Agricultural teacher, or any 4-H/FFA member who is interested in participating in future contests (all events except the State Fair are separate for 4-H and FFA) may obtain more information from the following horticultural specialists at Gainesville:

Jim Stephens or Kathleen Delate-
Vegetable Crops
Bob Black - Ornamental Horticulture
Jim Ferguson - Fruit Crops

For the third consecutive year, a National Community Gardening Contest will be co-sponsored by the
American Community Gardening Association (ACGA) and GLAD Wrap and Bags. The purpose of the contest is to focus public attention on the importance of community gardening, as well as to encourage and reward the efforts of the country's thousands of community gardeners.

In a letter to Dean Woeste, Secretary of Agriculture John R. Block stresses the importance and need for the Extension Service to get involved in the promotion of community gardening. He and his wife have a plot in a Washington community garden. He points out that community gardening in America is "an important example of people helping themselves and others in the task of affordable home food production".

Most of the one-million-plus vegetable gardens in Florida are of the back yard or container grown variety. However, I know many of you agents are aware of community gardens in your county that could be enrolled in the national contest. In fact, some of you are responsible for helping establish those gardens. And, most of you act as an educational resource providing technical assistance.

Florida has had many entries in the national contest during its first two years. In 1985, there were 25 entries from this state. We have had award-winning gardens from at least two counties - Duval and Osceola - and I may have overlooked one or two more.

At the national level in 1985, there were 620 entries and 118 winners. Once the field was narrowed down to 200 semi-finalists, garden coordinators were interviewed by telephone. In July, site visits were made, which presented a problem for Florida gardeners since our season was over by then.

The contest offers $26,000 in cash prizes divided into 5 categories: large site ($1,000), small site ($1,000), special populations site ($1,000), and food for others ($1,000).

Entry information is provided in the form of a Contest Kit. These kits will be sent directly from contest headquarters this month (March) to all those who requested information last year. New groups interested in entering can obtain a Contest Kit by writing to: ACGA, P.O. Box 93147, Milwaukee, Wisconsin 53202.

The Contest Kit contains:
- Contest rules and regulations,
- Official entry and site information form,
- Prize explanation sheet,
- Other information.

Contest rules and regulations
Who is eligible: Any community gardening group with 10 or more people who are engaged in the operation and maintenance of a community garden site. There must be at least one adult leader or advisor. Note: A gardener does not enter his individual plot, but the group enters. Important dates: Florida entry forms must be postmarked on or before May 1, 1986. Judging: Gardens are judged on one or more of the following:
- Evaluation of official entry form,
- Telephone interview with contact person to establish garden's history, organization, community involvement, and impact,
- Site visit to semi-finalists to evaluate practices and results.

Entry requirements:
- A community garden must be at least 100 square feet in area, including a minimum of four vegetables,
- Major focus on vegetable gardening,
- Photographs may be necessary,
- Official entry signs must be posted at garden sites.
Extension Agents

Please be looking for your Contest Kits soon if you have requested them. Once more, the address to obtain kits and more information is:
American Community Gardening Contest
P.O. Box 93147
Milwaukee, WI 53202

If you need help on establishing and conducting community gardens, feel free to get in touch with me.

(Stephens, Veg. 86-03)

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